

REMARKS

Claims 1-6 are pending.

Original claims 1-6 have been cancelled and replaced by a new set of claims 7-14, which better describe the invention.

The original claims, as understood, were rejected over the patent to Lambert, et al., U.S. 4,507,998.

The purpose of the present invention is to produce pieces of material that have linear sides.

In the preferred embodiment of the invention, the material to be processed is the endocarp (shell) of a coconut. Generally rectangle or square finished pieces are produced by the machine of the invention. The machine of the invention and that of Lambert are not comparable. The machine of Lambert is used to cut trunks of trees into slices and then to square it. The machine of Lambert cuts cylinder forms into small cylinder slices through a group of saws perfectly aligned in one line. These slices are then moved into another group of several saws aligned that cut the slices into smaller pieces. The machine of Lambert will not work if used to process coconut shells and the machine of the invention will not work to process the trunk of a tree. The goal of each machine is different.

The machine of the invention apart from the common part of transporters that exist in any machine, has a completely different set up from that of Lambert and subsequently a completely different concept and approach.

The first big difference is that the machine of the invention handles somewhat spherical objects. The coconut shell is generally spherical, being each one an irregular spherical shape with an infinity possibility of diameters and sizes. To produce smaller mosaics from it that can be glued

together that is, that have right angles in all the surfaces, the endocarp has to be submitted to several sequential cutting operations with different alignments of saws.

In the preferred embodiment of the invention, a first machine (A) would cut a thread from the half sphere of the endocarp. To do this two saws work together on the same axis. During the cutting process the shell is handled by a system of rollers between a pair of saws. After this first cut, the thread is moved to a new position to the fitting machine that linearizes the edges of the piece.

The fitting machine has a conveyor system and several pairs of saws. Each pair of saws is comprised of two saws working in the same axis. A piece of the shell material is placed in a conveyor chain of the conveyor system that runs between the saws of a pair. Cuts are made on the piece by the saws of a pair. This function is repeated until the piece has linear sides.

A novel feature of the invention as set forth in claim 9 is the design of each tooth of the conveyor's belt. The space between a pair of teeth have to be on a generally V shape, as can be seen on Fig. 6.5. In a preferred embodiment, as set forth in claims 10 and 12, pressure is applied by a belt on the top of the thread to assure its placement between the chain teeth in conjunction with the disposals of the saws of a pair so that squares are cut with a perfect 90° angle with all surfaces.

The novel machine of the invention makes it possible to create a new product and subsequently an industry, of coverings for walls, floors, and furniture made out of the coconut shell. With this invention, it is possible to create coverings for floors and walls, made out of wood material, but without cutting, or destroying the tree that originates it.

The new claims 7-14 define a novel and advantageous machine that is neither shown nor suggested by any of the prior art. Therefore, the claims are clearly patentable and should be allowed.

The other art cited has been considered and is not deemed pertinent.

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Prompt and favorable action is requested.

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Respectfully submitted,

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